UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/773,477	SASAKI, YOSHIO
	Examiner	Art Unit
	Joseph Saunders	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 May 2009*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,6,8-10,13,14 and 16-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,6,8-10,13,14 and 16-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   A request for continued examination under 37 CFR 1.114, including the

fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114,

and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the

previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on May 12, 2009 has been entered. Claims 1, 3, 6, 8

– 10, 13, 14, and 16 – 23 are currently pending and considered below.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

3.   Claims 1, 3, 6, 8 – 10, 13, 14, 16, 17, 19, and 23 are rejected under 35

U.S.C. 103(a) as being unpatentable over Mercer et al. (US 7,043,477 B2),

hereinafter Mercer, in view of Iwashima (US 4,667,314), hereinafter Iwashima,

Han et al. (US 2002/0031071 A1), hereinafter Han, and Hartley (US

2002/0103796 A1), hereinafter Hartley.

Claim 1: Mercer discloses an audio playback apparatus comprising: a sound

source storing (computer readable medium 110) folders (directories, playlists, or

playlist groups), wherein at least one of the folders includes albums (groups e.g.,

album, artist, genre), and at least one of the albums includes music files (group

of audio files), and wherein the folders and the albums are arranged in a

hierarchical manner (hierarchical data structure); playback unit specification

means (consumer electronic device 112 including input module 114, interface

module 116, and selection module 118) for specifying a shuffle unit (directory,

playlist, playlist group, group e.g., album, artist, genre, and also "individual media

file level") as any one of a folder, an album, and a music file, for use in selecting

music file group; music file group selection means for randomly selecting a music

file group in accordance with the shuffle unit; and playback means for

reproducing the music files included in the selected music file group before

reproducing music files included in the next music file group ("The user also can

manipulate the created playlists by shuffling or repeating the playlists. Such

shuffle or random play options may operate at the group level or at the individual

media file level, which allows, for example, playback of all songs by a random

artist before proceeding to the next random artist.") (Column 4 Line 29 – Column

6 Line 59).

While it is clear that Mercer teaches playback means for reproducing the

music files in the selected music file group (groups e.g., album, artist, genre)

before reproducing music files in the next music file group (groups e.g., album,

artist, genre); Mercer does not teach playback means for **randomly** reproducing

the music files in the selected music file group before reproducing music files in

the next music file group. Mercer does suggest shuffle or random play options

may operate at the individual media file level. Iwashima discloses a similar

playback means for reproducing the music files (tunes) in the selected music file

group (album) before reproducing music files in the next music file group (album)

and further illustrates the playback means with the claimed "random" option (See

Figures 1 – 3 in particular Figure 2C). Therefore, given that it was well known in

the art at the time of the invention to not only reproduce music files in a selected

music file group (groups e.g., album, artist, genre) before reproducing music files

in the next music file group (groups e.g., album, artist, genre) as disclosed by

Mercer, but also to randomly reproduce music files in a selected music file group

before reproducing music files in the next music file group as taught by

Iwashima; one of ordinary skill in the art at the time of the invention would have

found it obvious since Mercer also suggests shuffle or random play options may

operate at the individual media file level to include the option in the manner

taught by Iwashima, thereby allowing for randomly reproducing the music files in

the selected music file group (groups of Mercer e.g., album, artist, genre) before

reproducing music files in the next music file group (groups of Mercer e.g.,

album, artist, genre), which has the advantage of providing a greater variety of

playback modes, one of which may be preferable to the user.

Mercer and Iwashima do not explicitly state that the music files

themselves are arranged in a hierarchical manner; however Mercer does state

"Those skilled in the art will appreciate that the playlists and hierarchical

structures described herein are merely exemplary. It is contemplated by the

inventors that the invention includes other playlists, hierarchical structures, and

the like, including any combination of audio data, video data, or still image,"

Column 9 Lines 9 – 63).

Han teaches a method of recording MP3 tracks onto a disc, "Specially,

FIG. 6 illustrates a case that of sequentially numbering the MP3 tracks according

to a horizontal hierarchy of the tree structure referring to the file system of the

MP3 track recorded onto the inserted disc 101," [0093]. "Meanwhile, FIG. 7

illustrates a case that of sequentially numbering the MP3 tracks according to a

vertical hierarchy of the tree structure referring to the file system of the MP3 track

recorded onto the inserted disc 101," [0097]. Therefore given the variety of

methods for hierarchically structuring data taught by Han ([0091] – [0101] and

Figure 6 and 7), it would have been obvious to one of ordinary skill in the art at

the time of the invention given the motivation of Mercer to use a hierarchical

structure as disclosed by Han in the invention of Mercer and Iwashima, since

"there is provided the advantages that of classifying and numbering the audio

and the MP3 tracks recorded onto the inserted disc, and normally performing the

reproducing operation for the audio and the MP3 tracks for the user's command

for reproducing," Han [0111].

Further, while Mercer teaches a means for specifying a shuffle unit and

wherein a music file group comprises at least two music files (Figure 3 e.g.,

GROUP 3); Mercer does not disclose means for specifying a shuffle range, and

therefore does not teach the next music file group is selected from within the

shuffle range. Hartley teaches, "Many players afford the users the ability to play

music in random order. However, a combination of random selection and some

sort of preference would be useful," [0021]. Hartley goes on and teaches that

such a preference can be implemented through the use of a range of values for a

parameter, a parameter including any property of the file that is tracked by the

player [0023], "the player would then perform the shuffle on only those files

having a value for a particular user-defined parameter, allowing the user to

eliminate files that do not fit a particular category," [0031]. Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention to

include a shuffle range as taught by Hartley in addition to the shuffle unit as

taught by Mercer, thereby allowing for a sort preference to be included in the

invention of Mercer, Iwashima, and Han having the advantage of "allowing the

user to eliminate files that do not fit a particular category," Hartley [0031].

Claim 3: Mercer, Iwashima, Han, and Hartley disclose the audio playback

apparatus according to claim 1, and Mercer discloses the invention further

comprising: album (groups e.g., album, artist, genre) selection means for

randomly selecting an album from the selected music file group, if the playback

unit specification means specifies the folder (directory, playlist, or playlist group)

is specified by said playback unit specification means; wherein the playback

means reproduces the music files for each selected album ("The user also can

manipulate the created playlists by shuffling or repeating the playlists. Such

shuffle or random play options may operate at the group level or at the individual

media file level, which allows, for example, playback of all songs by a random

artist before proceeding to the next random artist.") (<u>Mercer</u> Column 4 Line 29 –

Column 6 Line 59 and Column 9 Lines 9 – 63).

Claim 6: <u>Mercer</u>, <u>Iwashima</u>, <u>Han</u>, and <u>Hartley</u> disclose the audio playback

apparatus according to claim 1, and <u>Mercer</u> discloses further wherein the

playback means sequentially reproduces the music files included in the selected

music file group in the order of their recording (<u>Mercer</u> Column 21 Lines 28 – 38).

Claim 8: <u>Mercer</u> discloses an audio playback apparatus comprising: a sound

source storing (computer readable medium 110) folders (directories, playlists, or

playlist groups), wherein at least one of the folders includes albums (groups e.g.,

album, artist, genre), and at least one of the albums includes music files (group

of audio files), and wherein the folders and the albums are arranged in a

hierarchical order (hierarchical data structure); album selection means for

randomly selecting one of the albums to be reproduced from the sound source;

and playback means for reproducing the music files in the selected album before

reproducing music files in the next album ("The user also can manipulate the

created playlists by shuffling or repeating the playlists. Such shuffle or random

play options may operate at the group level or at the individual media file level,

which allows, for example, playback of all songs by a random artist before

proceeding to the next random artist.") (Column 4 Line 29 – Column 6 Line 59).

       While it is clear that <u>Mercer</u> teaches playback means for reproducing the

music files in the selected music file group (groups e.g., album, artist, genre)

before reproducing music files in the next music file group (groups e.g., album, artist, genre); <u>Mercer</u> does not teach playback means for **randomly** reproducing the music files in the selected music file group before reproducing music files in the next music file group. <u>Mercer</u> does suggest shuffle or random play options may operate at the individual media file level. <u>Iwashima</u> discloses a similar playback means for reproducing the music files (tunes) in the selected music file group (album) before reproducing music files in the next music file group (album) and further illustrates the playback means with the claimed "random" option (See Figures 1 – 3 in particular Figure 2C). Therefore, given that it was well known in the art at the time of the invention to not only reproduce music files in a selected music file group (groups e.g., album, artist, genre) before reproducing music files in the next music file group (groups e.g., album, artist, genre) as disclosed by <u>Mercer</u>, but also to randomly reproduce music files in a selected music file group before reproducing music files in the next music file group as taught by <u>Iwashima</u>; one of ordinary skill in the art at the time of the invention would have found it obvious since <u>Mercer</u> also suggests shuffle or random play options may operate at the individual media file level to include the option in the manner taught by <u>Iwashima</u>, thereby allowing for randomly reproducing the music files in the selected music file group (groups of <u>Mercer</u> e.g., album, artist, genre) before reproducing music files in the next music file group (groups of <u>Mercer</u> e.g., album, artist, genre), which has the advantage of providing a greater variety of playback modes, one of which may be preferable to the user.

Mercer and Iwashima do not explicitly state that the music files

themselves are arranged in a hierarchical order; however Mercer does state

"Those skilled in the art will appreciate that the playlists and hierarchical

structures described herein are merely exemplary. It is contemplated by the

inventors that the invention includes other playlists, hierarchical structures, and

the like, including any combination of audio data, video data, or still image,"

Column 9 Lines 9 – 63).

Han teaches a method of recording MP3 tracks onto a disc, "Specially,

FIG. 6 illustrates a case that of sequentially numbering the MP3 tracks according

to a horizontal hierarchy of the tree structure referring to the file system of the

MP3 track recorded onto the inserted disc 101," [0093]. "Meanwhile, FIG. 7

illustrates a case that of sequentially numbering the MP3 tracks according to a

vertical hierarchy of the tree structure referring to the file system of the MP3 track

recorded onto the inserted disc 101," [0097]. Therefore given the variety of

methods for hierarchically structuring data taught by Han ([0091] – [0101] and

Figure 6 and 7), it would have been obvious to one of ordinary skill in the art at

the time of the invention given the motivation of Mercer to use a hierarchical

structure as disclosed by Han in the invention of Mercer and Iwashima, since

"there is provided the advantages that of classifying and numbering the audio

and the MP3 tracks recorded onto the inserted disc, and normally performing the

reproducing operation for the audio and the MP3 tracks for the user's command

for reproducing," Han [0111].

Further, while <u>Mercer</u> teaches a selection means for randomly selecting one of the albums; <u>Mercer</u> does not disclose means for specifying a shuffle range, and therefore does not teach selecting the next album from within the shuffle range. <u>Hartley</u> teaches, "Many players afford the users the ability to play music in random order. However, a combination of random selection and some sort of preference would be useful," [0021]. <u>Hartley</u> goes on and teaches that such a preference can be implemented through the use of a range of values for a parameter, a parameter including any property of the file that is tracked by the player [0023], "the player would then perform the shuffle on only those files having a value for a particular user-defined parameter, allowing the user to eliminate files that do not fit a particular category," [0031]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a shuffle range as taught by <u>Hartley</u> in addition to the shuffle means as taught by <u>Mercer</u>, thereby allowing for a sort preference to be included in the invention of <u>Mercer</u>, <u>Iwashima</u>, and <u>Han</u> having the advantage of "allowing the user to eliminate files that do not fit a particular category," <u>Hartley</u> [0031].

Claim 9: <u>Mercer</u> discloses an audio playback apparatus comprising: a sound source storing (computer readable medium 110) folders (directories, playlists, or playlist groups), wherein at least one of the folders includes albums (groups e.g., album, artist, genre), and at least one of the albums includes music files (group of audio files), and wherein the folders and the albums are arranged in a hierarchical order (hierarchical data structure); folder selection means for

randomly selecting one of the folders to be reproduced from the sound source;

and playback means for reproducing the music files in the selected folder before

reproducing music files in the next folder ("The user also can manipulate the

created playlists by shuffling or repeating the playlists. Such shuffle or random

play options may operate at the group level or at the individual media file level,

which allows, for example, playback of all songs by a random artist before

proceeding to the next random artist.") (Column 4 Line 29 – Column 6 Line 59).

    While it is clear that Mercer teaches playback means for reproducing the

music files in the selected music file group (groups e.g., album, artist, genre)

before reproducing music files in the next music file group (groups e.g., album,

artist, genre); Mercer does not teach playback means for **randomly** reproducing

the music files in the selected music file group before reproducing music files in

the next music file group. Mercer does suggest shuffle or random play options

may operate at the individual media file level. Iwashima discloses a similar

playback means for reproducing the music files (tunes) in the selected music file

group (album) before reproducing music files in the next music file group (album)

and further illustrates the playback means with the claimed "random" option (See

Figures 1 – 3 in particular Figure 2C). Therefore, given that it was well known in

the art at the time of the invention to not only reproduce music files in a selected

music file group (groups e.g., album, artist, genre) before reproducing music files

in the next music file group (groups e.g., album, artist, genre) as disclosed by

Mercer, but also to randomly reproduce music files in a selected music file group

before reproducing music files in the next music file group as taught by

Iwashima; one of ordinary skill in the art at the time of the invention would have

found it obvious since Mercer also suggests shuffle or random play options may

operate at the individual media file level to include the option in the manner

taught by Iwashima, thereby allowing for randomly reproducing the music files in

the selected music file group (groups of Mercer e.g., album, artist, genre) before

reproducing music files in the next music file group (groups of Mercer e.g.,

album, artist, genre), which has the advantage of providing a greater variety of

playback modes, one of which may be preferable to the user.

Mercer and Iwashima do not explicitly state that the music files

themselves are arranged in a hierarchical order; however Mercer does state

"Those skilled in the art will appreciate that the playlists and hierarchical

structures described herein are merely exemplary. It is contemplated by the

inventors that the invention includes other playlists, hierarchical structures, and

the like, including any combination of audio data, video data, or still image,"

Column 9 Lines 9 – 63).

Han teaches a method of recording MP3 tracks onto a disc, "Specially,

FIG. 6 illustrates a case that of sequentially numbering the MP3 tracks according

to a horizontal hierarchy of the tree structure referring to the file system of the

MP3 track recorded onto the inserted disc 101," [0093]. "Meanwhile, FIG. 7

illustrates a case that of sequentially numbering the MP3 tracks according to a

vertical hierarchy of the tree structure referring to the file system of the MP3 track

recorded onto the inserted disc 101," [0097]. Therefore given the variety of

methods for hierarchically structuring data taught by Han ([0091] – [0101] and

Figure 6 and 7), it would have been obvious to one of ordinary skill in the art at

the time of the invention given the motivation of Mercer to use a hierarchical

structure as disclosed by Han in the invention of Mercer and Iwashima, since

"there is provided the advantages that of classifying and numbering the audio

and the MP3 tracks recorded onto the inserted disc, and normally performing the

reproducing operation for the audio and the MP3 tracks for the user's command

for reproducing," Han [0111].

Further, while Mercer teaches a selection means for randomly selecting

one of the folders; Mercer does not disclose means for specifying a shuffle

range, and therefore does not teach selecting the next folder from within the

shuffle range. Hartley teaches, "Many players afford the users the ability to play

music in random order. However, a combination of random selection and some

sort of preference would be useful," [0021]. Hartley goes on and teaches that

such a preference can be implemented through the use of a range of values for a

parameter, a parameter including any property of the file that is tracked by the

player [0023], "the player would then perform the shuffle on only those files

having a value for a particular user-defined parameter, allowing the user to

eliminate files that do not fit a particular category," [0031]. Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention to

include a shuffle range as taught by Hartley in addition to the shuffle means as

taught by Mercer, thereby allowing for a sort preference to be included in the

invention of Mercer, Iwashima, and Han having the advantage of "allowing the

user to eliminate files that do not fit a particular category," Hartley [0031].

Claim 10: Mercer discloses an audio playback method comprising the steps of:

specifying, in a sound source (computer readable medium 110), a shuffle unit

(directory, playlist, playlist group, group e.g., album, artist, genre, and also

"individual media file level") as any one of a folder, an album, and a music file, for

use in selecting music file groups; wherein the sound source stores folders

(directories, playlists, or playlist groups), and at least one of the folders including

albums (groups e.g., album, artist, genre), and at least one of the albums

including music files (group of audio files), and wherein the folders and the

albums are arranged in a hierarchical manner (hierarchical data structure);

randomly selecting a music file group in accordance with the shuffle unit; and

reproducing the music files included in the selected music file group before

reproducing music files included in the next music file group ("The user also can

manipulate the created playlists by shuffling or repeating the playlists. Such

shuffle or random play options may operate at the group level or at the individual

media file level, which allows, for example, playback of all songs by a random

artist before proceeding to the next random artist.") (Column 4 Line 29 – Column

6 Line 59).

    While it is clear that Mercer teaches playback means for reproducing the

music files in the selected music file group (groups e.g., album, artist, genre)

before reproducing music files in the next music file group (groups e.g., album,

artist, genre); Mercer does not teach playback means for **randomly** reproducing

the music files in the selected music file group before reproducing music files in

the next music file group. Mercer does suggest shuffle or random play options

may operate at the individual media file level. Iwashima discloses a similar

playback means for reproducing the music files (tunes) in the selected music file

group (album) before reproducing music files in the next music file group (album)

and further illustrates the playback means with the claimed "random" option (See

Figures 1 – 3 in particular Figure 2C). Therefore, given that it was well known in

the art at the time of the invention to not only reproduce music files in a selected

music file group (groups e.g., album, artist, genre) before reproducing music files

in the next music file group (groups e.g., album, artist, genre) as disclosed by

Mercer, but also to randomly reproduce music files in a selected music file group

before reproducing music files in the next music file group as taught by

Iwashima; one of ordinary skill in the art at the time of the invention would have

found it obvious since Mercer also suggests shuffle or random play options may

operate at the individual media file level to include the option in the manner

taught by Iwashima, thereby allowing for randomly reproducing the music files in

the selected music file group (groups of Mercer e.g., album, artist, genre) before

reproducing music files in the next music file group (groups of Mercer e.g.,

album, artist, genre), which has the advantage of providing a greater variety of

playback modes, one of which may be preferable to the user.

Mercer and Iwashima do not explicitly state that the music files

themselves are arranged in a hierarchical manner; however Mercer does state

"Those skilled in the art will appreciate that the playlists and hierarchical

structures described herein are merely exemplary. It is contemplated by the

inventors that the invention includes other playlists, hierarchical structures, and the like, including any combination of audio data, video data, or still image," Column 9 Lines 9 – 63).

Han teaches a method of recording MP3 tracks onto a disc, "Specially, FIG. 6 illustrates a case that of sequentially numbering the MP3 tracks according to a horizontal hierarchy of the tree structure referring to the file system of the MP3 track recorded onto the inserted disc 101," [0093]. "Meanwhile, FIG. 7 illustrates a case that of sequentially numbering the MP3 tracks according to a vertical hierarchy of the tree structure referring to the file system of the MP3 track recorded onto the inserted disc 101," [0097]. Therefore given the variety of methods for hierarchically structuring data taught by Han ([0091] – [0101] and Figure 6 and 7), it would have been obvious to one of ordinary skill in the art at the time of the invention given the motivation of Mercer to use a hierarchical structure as disclosed by Han in the invention of Mercer and Iwashima, since "there is provided the advantages that of classifying and numbering the audio and the MP3 tracks recorded onto the inserted disc, and normally performing the reproducing operation for the audio and the MP3 tracks for the user's command for reproducing," Han [0111].

Further, while Mercer teaches a means for specifying a shuffle unit and wherein a music file group comprises at least two music files (Figure 3 e.g., GROUP 3); Mercer does not disclose means for specifying a shuffle range, and therefore does not teach the next music file group is selected by a processor from within the shuffle range. Hartley teaches, "Many players afford the users the

ability to play music in random order. However, a combination of random

selection and some sort of preference would be useful," [0021]. Hartley goes on

and teaches that such a preference can be implemented through the use of a

range of values for a parameter, a parameter including any property of the file

that is tracked by the player [0023], "the player would then perform the shuffle on

only those files having a value for a particular user-defined parameter, allowing

the user to eliminate files that do not fit a particular category," [0031]. Therefore,

it would have been obvious to one of ordinary skill in the art at the time of the

invention to include a shuffle range as taught by Hartley in addition to the shuffle

unit as taught by Mercer, thereby allowing for a sort preference to be included in

the invention of Mercer, Iwashima, and Han having the advantage of "allowing

the user to eliminate files that do not fit a particular category," Hartley [0031].

Claim 13: Mercer, Iwashima, Han, and Hartley disclose the audio playback

method according to claim 10, and Mercer discloses the invention further

comprising the step of: randomly selecting an album (groups e.g., album, artist,

genre) from said selected music file group if, from said sound source recording a

folder (directory or playlist), an album formed in said folder, and a music file

formed in said album in a hierarchical manner, said folder is specified in said

playback unit specification step; wherein said playback step reproduces music

files for each selected album ("The user also can manipulate the created playlists

by shuffling or repeating the playlists. Such shuffle or random play options may

operate at the group level or at the individual media file level, which allows, for

example, playback of all songs by a random artist before proceeding to the next

random artist.") (Mercer Column 4 Line 29 – Column 6 Line 59 and Column 9

Lines 9 – 63).

Claim 14: Mercer discloses a computer readable media storing a computer

program that causes a processor to perform a method , the method comprising:

specifying, in a sound source (computer readable medium 110) in a hierarchical

manner (hierarchical data structure), a shuffle unit (directory, playlist, playlist

group, group e.g., album, artist, genre, and also "individual media file level") as

any one of a folder, an album, and a music file, for use in selecting music file

groups, wherein the sound source stores folders (directories, playlists, or playlist

groups), and at least one of the folders including albums (groups e.g., album,

artist, genre), and at least one of the albums including music files (group of audio

files), and wherein the folders and the albums are arranged in a hierarchical

manner (hierarchical data structure); randomly selecting a music file group in

accordance with the specified unit; and reproducing the music files included in

the selected music file group before reproducing music files included in the next

music file group ("The user also can manipulate the created playlists by shuffling

or repeating the playlists. Such shuffle or random play options may operate at the

group level or at the individual media file level, which allows, for example,

playback of all songs by a random artist before proceeding to the next random

artist.") (Column 4 Line 29 – Column 6 Line 59).

While it is clear that <u>Mercer</u> teaches playback means for reproducing the music files in the selected music file group (groups e.g., album, artist, genre) before reproducing music files in the next music file group (groups e.g., album, artist, genre); <u>Mercer</u> does not teach playback means for **randomly** reproducing the music files in the selected music file group before reproducing music files in the next music file group. <u>Mercer</u> does suggest shuffle or random play options may operate at the individual media file level. <u>Iwashima</u> discloses a similar playback means for reproducing the music files (tunes) in the selected music file group (album) before reproducing music files in the next music file group (album) and further illustrates the playback means with the claimed "random" option (See Figures 1 – 3 in particular Figure 2C). Therefore, given that it was well known in the art at the time of the invention to not only reproduce music files in a selected music file group (groups e.g., album, artist, genre) before reproducing music files in the next music file group (groups e.g., album, artist, genre) as disclosed by <u>Mercer</u>, but also to randomly reproduce music files in a selected music file group before reproducing music files in the next music file group as taught by <u>Iwashima</u>; one of ordinary skill in the art at the time of the invention would have found it obvious since <u>Mercer</u> also suggests shuffle or random play options may operate at the individual media file level to include the option in the manner taught by <u>Iwashima</u>, thereby allowing for randomly reproducing the music files in the selected music file group (groups of <u>Mercer</u> e.g., album, artist, genre) before reproducing music files in the next music file group (groups of <u>Mercer</u> e.g.,

album, artist, genre), which has the advantage of providing a greater variety of

playback modes, one of which may be preferable to the user.

Mercer and Iwashima do not explicitly state that the music files

themselves are arranged in a hierarchical manner; however Mercer does state

"Those skilled in the art will appreciate that the playlists and hierarchical

structures described herein are merely exemplary. It is contemplated by the

inventors that the invention includes other playlists, hierarchical structures, and

the like, including any combination of audio data, video data, or still image,"

Column 9 Lines 9 – 63).

Han teaches a method of recording MP3 tracks onto a disc, "Specially,

FIG. 6 illustrates a case that of sequentially numbering the MP3 tracks according

to a horizontal hierarchy of the tree structure referring to the file system of the

MP3 track recorded onto the inserted disc 101," [0093]. "Meanwhile, FIG. 7

illustrates a case that of sequentially numbering the MP3 tracks according to a

vertical hierarchy of the tree structure referring to the file system of the MP3 track

recorded onto the inserted disc 101," [0097]. Therefore given the variety of

methods for hierarchically structuring data taught by Han ([0091] – [0101] and

Figure 6 and 7), it would have been obvious to one of ordinary skill in the art at

the time of the invention given the motivation of Mercer to use a hierarchical

structure as disclosed by Han in the invention of Mercer and Iwashima, since

"there is provided the advantages that of classifying and numbering the audio

and the MP3 tracks recorded onto the inserted disc, and normally performing the

reproducing operation for the audio and the MP3 tracks for the user's command

for reproducing," <u>Han</u> [0111].

Further, while <u>Mercer</u> teaches a means for specifying a shuffle unit and

wherein a music file group comprises at least two music files (Figure 3 e.g.,

GROUP 3); <u>Mercer</u> does not disclose means for specifying a shuffle range, and

therefore does not teach the next music file group is selected from within the

shuffle range. <u>Hartley</u> teaches, "Many players afford the users the ability to play

music in random order. However, a combination of random selection and some

sort of preference would be useful," [0021]. <u>Hartley</u> goes on and teaches that

such a preference can be implemented through the use of a range of values for a

parameter, a parameter including any property of the file that is tracked by the

player [0023], "the player would then perform the shuffle on only those files

having a value for a particular user-defined parameter, allowing the user to

eliminate files that do not fit a particular category," [0031]. Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention to

include a shuffle range as taught by <u>Hartley</u> in addition to the shuffle unit as

taught by <u>Mercer</u>, thereby allowing for a sort preference to be included in the

invention of <u>Mercer</u>, <u>Iwashima</u>, and <u>Han</u> having the advantage of "allowing the

user to eliminate files that do not fit a particular category," <u>Hartley</u> [0031].

Claim 16: <u>Mercer</u>, <u>Iwashima</u>, <u>Han</u>, and <u>Hartley</u> disclose the media according to

claim 14, and <u>Mercer</u> discloses wherein the method further comprises: randomly

selecting an album from the selected music file group (groups e.g., album, artist,

genre) if a folder is specified by said playback unit specification function; wherein

the playback function reproduces music files for each selected album ("The user

also can manipulate the created playlists by shuffling or repeating the playlists.

Such shuffle or random play options may operate at the group level or at the

individual media file level, which allows, for example, playback of all songs by a

random artist before proceeding to the next random artist.") (Mercer Column 4

Line 29 – Column 6 Line 59 and Column 9 Lines 9 – 63).

Claim 17: Mercer, Iwashima, Han, and Hartley disclose the audio playback

apparatus according to claim 1, further comprising: mode selection means for

selecting a first or second reproducing mode through a user interface (consumer

electronic device 112 including input module 114, interface module 116, and

selection module 118), wherein the first reproducing mode allows for random

playback on an album basis and the second reproducing mode allows for random

playback on an individual music file basis ("Such shuffle or random play options

may operate at the group level or at the individual media file level," Mercer

Column 4 Line 29 – Column 6 Line 59 and Column 9 Lines 9 – 63).

Claim 19: Mercer, Iwashima, Han, and Hartley disclose the audio playback

method according to claim 10, further comprising: selecting a first or second

reproducing mode through a user interface (consumer electronic device 112

including input module 114, interface module 116, and selection module 118),

wherein the first reproducing mode allows for random playback on an album

basis and the second reproducing mode allows for random playback on an

individual music file basis ("Such shuffle or random play options may operate at

the group level or at the individual media file level," Mercer Column 4 Line 29 –

Column 6 Line 59 and Column 9 Lines 9 – 63).

Claim 23: Mercer discloses an audio playback apparatus comprising: a sound

source (computer readable medium 110) configured to store folders (directories,

playlists, or playlist groups), wherein at least one of the folders includes albums

(groups e.g., album, artist, genre), and at least one of the albums includes music

files (group of audio files), and wherein the folders, the albums, and the music

files are arranged in a hierarchical manner (hierarchical data structure);

a user interface configured to receive a user input (consumer electronic device

112 including input module 114, interface module 116, and selection module

118), the user input comprising a shuffle unit (directory, playlist, playlist group,

group e.g., album, artist, genre, and also "individual media file level") as any one

of a folder, an album, and a music file, for use in selecting music file groups, a

system control unit configured to randomly select a music file group in

accordance with the shuffle unit, and randomly select a next music file group;

and an output unit configured to reproduce the music files included in the

selected music file group before reproducing music files included in the next

music file group ("The user also can manipulate the created playlists by shuffling

or repeating the playlists. Such shuffle or random play options may operate at the

group level or at the individual media file level, which allows, for example,

playback of all songs by a random artist before proceeding to the next random

artist.") (Column 4 Line 29 – Column 6 Line 59).

While it is clear that Mercer teaches playback means for reproducing the

music files in the selected music file group (groups e.g., album, artist, genre)

before reproducing music files in the next music file group (groups e.g., album,

artist, genre); Mercer does not teach playback means for **randomly** reproducing

the music files in the selected music file group before reproducing music files in

the next music file group. Mercer does suggest shuffle or random play options

may operate at the individual media file level. Iwashima discloses a similar

playback means for reproducing the music files (tunes) in the selected music file

group (album) before reproducing music files in the next music file group (album)

and further illustrates the playback means with the claimed "random" option (See

Figures 1 – 3 in particular Figure 2C). Therefore, given that it was well known in

the art at the time of the invention to not only reproduce music files in a selected

music file group (groups e.g., album, artist, genre) before reproducing music files

in the next music file group (groups e.g., album, artist, genre) as disclosed by

Mercer, but also to randomly reproduce music files in a selected music file group

before reproducing music files in the next music file group as taught by

Iwashima; one of ordinary skill in the art at the time of the invention would have

found it obvious since Mercer also suggests shuffle or random play options may

operate at the individual media file level to include the option in the manner

taught by Iwashima, thereby allowing for randomly reproducing the music files in

the selected music file group (groups of Mercer e.g., album, artist, genre) before

reproducing music files in the next music file group (groups of Mercer e.g.,

album, artist, genre), which has the advantage of providing a greater variety of

playback modes, one of which may be preferable to the user.

Mercer and Iwashima do not explicitly state that the music files

themselves are arranged in a hierarchical manner; however Mercer does state

"Those skilled in the art will appreciate that the playlists and hierarchical

structures described herein are merely exemplary. It is contemplated by the

inventors that the invention includes other playlists, hierarchical structures, and

the like, including any combination of audio data, video data, or still image,"

Column 9 Lines 9 – 63).

Han teaches a method of recording MP3 tracks onto a disc, "Specially,

FIG. 6 illustrates a case that of sequentially numbering the MP3 tracks according

to a horizontal hierarchy of the tree structure referring to the file system of the

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illustrates a case that of sequentially numbering the MP3 tracks according to a

vertical hierarchy of the tree structure referring to the file system of the MP3 track

recorded onto the inserted disc 101," [0097]. Therefore given the variety of

methods for hierarchically structuring data taught by Han ([0091] – [0101] and

Figure 6 and 7), it would have been obvious to one of ordinary skill in the art at

the time of the invention given the motivation of Mercer to use a hierarchical

structure as disclosed by Han in the invention of Mercer and Iwashima, since

"there is provided the advantages that of classifying and numbering the audio

and the MP3 tracks recorded onto the inserted disc, and normally performing the

reproducing operation for the audio and the MP3 tracks for the user's command

for reproducing," Han [0111].

Further, while Mercer teaches a means for specifying a shuffle unit and

wherein a music file group comprises at least two music files (Figure 3 e.g.,

GROUP 3); Mercer does not disclose the user input also comprising a shuffle

range, and therefore does not teach the next music file group is selected from

within the shuffle range. Hartley teaches, "Many players afford the users the

ability to play music in random order. However, a combination of random

selection and some sort of preference would be useful," [0021]. Hartley goes on

and teaches that such a preference can be implemented through the use of a

range of values for a parameter, a parameter including any property of the file

that is tracked by the player [0023], "the player would then perform the shuffle on

only those files having a value for a particular user-defined parameter, allowing

the user to eliminate files that do not fit a particular category," [0031]. Therefore,

it would have been obvious to one of ordinary skill in the art at the time of the

invention to include user input for a shuffle range as taught by Hartley in addition

to the shuffle unit as taught by Mercer, thereby allowing for a sort preference to

be included in the invention of Mercer, Iwashima, and Han having the advantage

of "allowing the user to eliminate files that do not fit a particular category," Hartley

[0031].

4.   Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over <u>Mercer</u>, <u>Iwashima</u>, <u>Han</u>, and <u>Hartley</u> in view of Zamir et al. (US

2003/0236582 A1), hereinafter <u>Zamir</u>.

Claim 18: <u>Mercer</u>, <u>Iwashima</u>, <u>Han</u>, and <u>Hartley</u> disclose the audio playback

apparatus according to claim 1, but do not disclose the invention further

comprising a touch screen user interface. <u>Mercer</u> does disclose using a touch

pad as an input device or user interface selection device and also gives other

examples (Column 18 Lines 12 – 27). <u>Zamir</u> discloses a similar audio device and

teaches using a touch screen to allow for input by a user [0109] and [0174].

Therefore, give that <u>Mercer</u> contemplates using alternative methods for user

input and <u>Zamir</u> teaches it is well known to user a touch screen, it would have

been obvious to one of ordinary skill in the art at the time of the invention to use a

touch screen as disclosed by <u>Zamir</u> in the invention of <u>Mercer</u>, <u>Iwashima</u>, <u>Han</u>,

and <u>Hartley</u>, thereby allowing for intuitive user interface to input selections.

Claim 20 is substantially similar in scope to claim 18 and therefore is rejected for

the same reasons.

5.   Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over <u>Mercer</u>, <u>Iwashima</u>, <u>Han</u>, and <u>Hartley</u> in view of Schilling, Jr. et

al. (US 6,707,768 B2), hereinafter <u>Schilling</u>.

Claim 21: Mercer, Iwashima, Han, and Hartley disclose audio playback

apparatus according to claim 1, wherein the shuffle range is selected by a user,

but do not explicitly disclose the shuffle range selectable as "all", "folder", and

"album" and therefore do not explicitly teach if the shuffle range is selected as all,

then the next music file group is selected randomly from among all areas of the

sound source; if the shuffle range is selected as folder, then the next music file

group is selected randomly from among a current folder of the music file group;

and if the shuffle range is selected as album, then the next music file group is

selected randomly from among a current album of the music file group. Hartley

does teach that a sort preference can be implemented through the use of a range

of values for a parameter, a parameter including any property of the file that is

tracked by the player [0023]. Hartley also teaches that it is advantageous to have

a user defined parameter in order to "perform the shuffle on only those files

having a value for a particular user-defined parameter, allowing the user to

eliminate files that do not fit a particular category," [0031]. Schilling also teaches

randomized playback of tracks in a multimedia player and also gives additional

examples of sort preferences according to category including "shuffle all" and "if

"shuffle all" is not enabled, then shuffle by individual disc is processed," Column

2 Lines 44 – 67. Further, Mercer, Iwashima, Han, and Hartley previously taught

categories or folders (directories, playlists, or playlist groups), albums (groups

e.g., album, artist, genre), and music files (group of audio files), arranged in a

hierarchical manner (hierarchical data structure), where, "metadata is obtained

from the input media files for use in defining groups," Mercer Column 4 Line 29 –

Column 6 Line 59 and Column 7 Lines 1 – 2. Therefore, it would have been

obvious to one of ordinary skill in the art at the time of the invention to use the

metadata (parameter of a file that is tracked by the player as taught by Hartley)

defining the categories as disclosed by Mercer, as a user-definable parameter as

suggested by Hartley to enable a shuffle range parameter of "shuffle all" and

"shuffle disc" as taught by Schilling, and also a "shuffle folder" since the folder

parameter is defined by the invention of Mercer, Iwashima, Han, and Hartley,

thereby allowing for user-definable sort preferences or shuffle ranges as taught

by Hartley and further exemplified by Schilling, "allowing the user to eliminate

files that do not fit a particular category," Hartley [0031].

Claim 22 is substantially similar in scope to claim 21 and therefore is rejected for

the same reasons.

Response to Arguments

6.   Applicant's arguments with respect to claims 1, 3, 6, 8 – 10, 13, 14, and 16

– 23 have been considered but are moot in view of the new ground(s) of

rejection.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Joseph Saunders whose telephone number is

(571) 270-1063. The examiner can normally be reached on Monday - Thursday,

9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Curtis Kuntz can be reached on (571) 272-7499. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

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PAIR. Status information for unpublished applications is available through

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free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

/J. S./
Examiner, Art Unit 2614
/CURTIS KUNTZ/
Supervisory Patent Examiner, Art Unit 2614